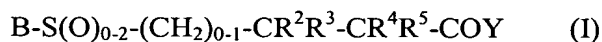


Claims

We claim:

- 5 1. A compound of formula (I)



wherein

Y is selected from the group consisting of OR¹ and NHOH;

10 R² and R⁴ are independently selected from the group consisting of H and a moiety (optionally substituted with R¹⁰) selected from C₁₋₆ alkyl, C₂₋₆ alkenyl, aryl, C₁₋₆ alkyl-aryl, heteroaryl, C₁₋₆ alkyl-heteroaryl, heterocycloalkyl, C₁₋₆ alkyl-heterocycloalkyl, cycloalkyl and C₁₋₆ alkyl-cycloalkyl;

R¹ and R³ and R⁵ are independently selected from the group consisting of H and C₁₋₆ alkyl;

15 provided that not more than two of R², R³, R⁴ and R⁵ are H; or

any of CR²R³, CR⁴R⁵ and CR²-CR⁴ is a cycloalkyl or heterocycloalkyl ring optionally substituted with R¹⁰ or a group (optionally substituted with R¹⁰) selected from C₁₋₆ alkyl, aryl, C₁₋₆ alkyl-aryl, heteroaryl and C₁₋₆ alkyl-heteroaryl;

20 B is selected from the group consisting of C₁₋₈ alkyl, C₂₋₆ alkenyl and C₂₋₆ alkynyl, and is substituted with R⁶;

R⁶ is selected from the group consisting of N(R⁷)₂, OR⁷, COR⁷, C(=NOR⁹)R⁷, NR⁷R⁸, S(O)₀₋₂R⁹, and SO₂N(R⁷)₂;

25 R⁷ is selected from the group consisting of H and a moiety selected from C₁₋₆ alkyl, aryl, C₁₋₆ alkyl-aryl, heteroaryl, C₁₋₆ alkyl-heteroaryl, cycloalkyl, C₁₋₆ alkyl-cycloalkyl, heterocycloalkyl and C₁₋₆ alkyl-heterocycloalkyl, wherein said moiety is optionally substituted with R⁹, COR⁹, SO₀₋₂R⁹, CO₂R⁹, OR⁹, CONR¹R⁹, NR¹R⁹, halogen, CN, SO₂NR¹R⁹ or NO₂, and for each case of N(R⁷)₂ the R⁷ groups are the same or different, or N(R⁷)₂ is heterocycloalkyl optionally substituted with R⁹, COR⁹, SO₀₋₂R⁹, CO₂R⁹, OR⁹, CONR¹R⁹, NR¹R⁹, halogen, CN, SO₂NR¹R⁹ or NO₂;

30 R⁸ is selected from the group consisting of COR⁷, CON(R⁷)₂, CO₂R⁹ and SO₂R⁹;

R⁹ is selected from the group consisting of C₁₋₆ alkyl, aryl, C₁₋₆ alkyl-aryl, heteroaryl and C₁₋₆ alkyl-heteroaryl; and

R^{10} is selected from the group consisting of OR^7 , COR^7 , CO_2R^1 , $CON(R^7)_2$, NR^7R^8 , $S(O)_{0-2}R^9$, $SO_2N(R^7)_2$, CN, halogen and cycloimidyl (optionally substituted with R^1); or

a salt, solvate, hydrate, N-oxide or protected amino, protected carboxy or protected hydroxamic acid derivative thereof.

2. The compound of claim 1, wherein R^2 or R^4 is optionally substituted C_{1-6} alkyl, C_{1-6} alkyl-heteroaryl, or C_{1-6} alkyl-heterocycloalkyl; or CR^2R^3 , CR^4R^5 or CR^2-CR^4 forms the said optionally substituted ring.

3. The compound of claim 1, wherein B is C_{1-8} alkyl substituted with R^6 .

4. The compound of claim 3, wherein B is C_{1-8} alkyl substituted with OR^7 .

5. The compound of claim 4, wherein R^7 is optionally substituted aryl or heteroaryl.

6. The compound of claim 1, wherein $S(O)_{0-2}$ is SO_2 .

7. The compound of claim 1, selected from the group consisting of methyl 4-((3-(3-pyridyloxy)propylsulfanyl)methyl)tetrahydropyran-4-carboxylate, methyl 4-((3-(3-pyridyloxy)propylsulfonyl)methyl)tetrahydropyran-4-carboxylate, and 4-((3-(4-pyridyloxy)propylsulfonyl)methyl)tetrahydropyran-4-carboxylate.

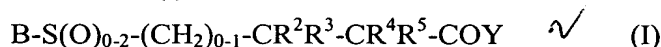
8. The compound of claim 1, selected from the group consisting of 2-(3-phenoxypropylsulfanyl)cyclopentanecarboxylic acid methyl ester, 2-(3-phenoxypropane-1-sulfonyl)cyclopentanecarboxylic acid methyl ester, 2-(3-phenoxypropane-1-sulfonyl)cyclopentanecarboxylic acid and 2-(3-phenoxypropane-1-sulfonyl)cyclopentanecarboxylic acid hydroxyamide.

9. A pharmaceutical composition for the use in therapy, comprising a compound of claim 1, and a pharmaceutically-acceptable diluent or carrier.

10. A method for the treatment of a condition selected from the group consisting of asthma, inflammation, inflammatory diseases, autoimmune, infectious or ocular diseases, age-related macular degeneration, and cancer, which comprises administering to a subject in need thereof an effective amount of a compound of claim 1.

5

11. A compound of formula (I)



wherein

Y is selected from the group consisting of OR^1 and $NHOH$;

10

R^2 and R^4 are independently selected from the group consisting of H and a moiety (optionally substituted with R^{10}) selected from C_{1-6} alkyl, C_{2-6} alkenyl, aryl, C_{1-6} alkyl-aryl, heteroaryl, C_{1-6} alkyl-heteroaryl, heterocycloalkyl, C_{1-6} alkyl-heterocycloalkyl, cycloalkyl and C_{1-6} alkyl-cycloalkyl;

15

R^1 , R^3 and R^5 are independently selected from the group consisting of H and C_{1-6} alkyl;

provided that not more than two of R^2 , R^3 , R^4 and R^5 are H; or

any of CR^2R^3 , CR^4R^5 and CR^2-CR^4 is a cycloalkyl or heterocycloalkyl ring optionally substituted with R^{10} or a group (optionally substituted with R^{10}) selected from C_{1-6} alkyl, aryl, C_{1-6} alkyl-aryl, heteroaryl and C_{1-6} alkyl-heteroaryl;

20

B is C_{1-6} alky-heterocycloalkyl group optionally substituted with R^6 or R^7 ;

R^6 is selected from the group consisting of $N(R^7)_2$, OR^7 , COR^7 , $C(=NOR^9)R^7$, NR^7R^8 , $S(O)_{0-2}R^9$ and $SO_2N(R^7)_2$;

25

R^7 is selected from the group consisting of H and a moiety selected from C_{1-6} alkyl, aryl, C_{1-6} alky-aryl, heteroaryl, C_{1-6} alky-heteroaryl, cycloalkyl, C_{1-6} alkyl-cycloalkyl, heterocycloalkyl and C_{1-6} alkyl-heterocycloalkyl, wherein said moiety is optionally substituted with R^9 , COR^9 , $SO_{0-2}R^9$, CO_2R^9 , OR^9 , $CONR^1R^9$, NR^1R^9 , halogen, CN, $SO_2NR^1R^9$ or NO_2 , and for each case of $N(R^7)_2$ the R^7 groups are the same or different, or $N(R^7)_2$ is heterocycloalkyl optionally substituted with R^9 , COR^9 , $SO_{0-2}R^9$, CO_2R^9 , OR^9 , $CONR^1R^9$, NR^1R^9 , halogen, CN, $SO_2NR^1R^9$ or NO_2 ;

30

R^8 is selected from the group consisting of COR^7 , $CON(R^7)_2$, CO_2R^9 and SO_2R^9 ;

R^9 is selected from the group consisting of C_{1-6} alkyl, aryl, C_{1-6} alkyl-aryl, heteroaryl and C_{1-6} alkyl-heteroaryl; and

R^{10} is selected from the group consisting of OR^7 , COR^7 , CO_2R^1 , $CON(R^7)_2$, NR^7R^8 , $S(O)_{0-2}R^9$, $SO_2N(R^7)_2$, CN, halogen and cycloimidyl (optionally substituted with R^1); or a salt, solvate, hydrate, N-oxide or protected amino, protected carboxy or protected hydroxamic acid derivative thereof.

5

12. The compound of claim 11, wherein R^2 or R^4 is optionally substituted C_{1-6} alkyl, C_{1-6} alkyl-heteroaryl, or C_{1-6} alkyl-heterocycloalkyl; or CR^2R^3 , CR^4R^5 or CR^2-CR^4 forms the said optionally substituted ring.

10

13. The compound of claim 11, wherein the alkyl group in B is selected from the group consisting of ethyl and propyl.

15

14. The compound of claim 11, wherein the heterocycloalkyl group in B is selected from the group consisting of azetidiny, pyrrolidiny and piperdiny, aryl which is substituted with R^7 .

15. The compound of claim 14, wherein R^7 is optionally substituted aryl or heteroaryl.

20

16. The compound of claim 11, wherein $S(O)_{0-2}$ is SO_2 .

25

17. The compound of claim 11, selected from the group consisting of
1-{2-[1-(4-nitrophenyl)pyrrolidin-3-yl]ethylsulfanylmethyl}cyclobutanecarboxylic acid ethyl ester,
1-{2-[1-(4-nitrophenyl)pyrrolidin-3-yl]ethanesulfonylmethyl}cyclobutanecarboxylic acid ethyl ester,
1-{2-[1-(4-nitrophenyl)pyrrolidin-3-yl]ethanesulfonylmethyl}cyclobutanecarboxylic acid and
2-(piperidin-4-ylsulfanyl)cyclopentanecarboxylic acid methyl ester.

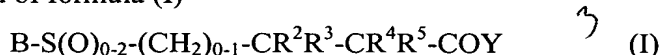
30

18. A pharmaceutical composition for use in therapy, comprising a compound of claim 11, and a pharmaceutically-acceptable diluent or carrier.

19. A method for the treatment of a condition selected from the group consisting of asthma, inflammation, inflammatory diseases, autoimmune, infectious or ocular diseases, age-related macular degeneration, and cancer, which comprises administering to a subject in need thereof an effective amount of a compound of claim 11.

5

20. A compound of formula (I)



wherein

Y is selected from the group consisting of OR^1 and $NHOH$;

10 R^2 and R^4 are independently selected from the group consisting of H and a moiety (optionally substituted with R^{10}) selected from C_{1-6} alkyl, C_{2-6} alkenyl, aryl, C_{1-6} alkyl-aryl, heteroaryl, C_{1-6} alkyl-heteroaryl, heterocycloalkyl, C_{1-6} alkyl-heterocycloalkyl, cycloalkyl and C_{1-6} alkyl-cycloalkyl;

15 R^1 , R^3 and R^5 are independently selected from the group consisting of H and C_{1-6} alkyl;

provided that not more than two of R^2 , R^3 , R^4 and R^5 are H; or

any of CR^2R^3 , CR^4R^5 and CR^2-CR^4 is a cycloalkyl or heterocycloalkyl ring optionally substituted with R^{10} or a group (optionally substituted with R^{10}) selected from C_{1-6} alkyl, aryl, C_{1-6} alkyl-aryl, heteroaryl and C_{1-6} alkyl-heteroaryl;

20 B is heterocycloalkyl, optionally substituted with R^6 or R^7 , bonded through a C atom to $S(O)_{0-2}$.

R^6 is selected from the group consisting of $N(R^7)_2$, OR^7 , COR^7 , $C(=NOR^9)R^7$, NR^7R^8 , $S(O)_{0-2}R^9$ and $SO_2N(R^7)_2$;

25 R^7 is selected from the group consisting of H and a moiety selected from C_{1-6} alkyl, aryl, C_{1-6} alkyl-aryl, heteroaryl, C_{1-6} alkyl-heteroaryl, cycloalkyl, C_{1-6} alkyl-cycloalkyl, heterocycloalkyl and C_{1-6} alkyl-heterocycloalkyl, wherein said moiety is optionally substituted with R^9 , COR^9 , $SO_{0-2}R^9$, CO_2R^9 , OR^9 , $CONR^1R^9$, NR^1R^9 , halogen, CN, $SO_2NR^1R^9$ or NO_2 , and for each case of $N(R^7)_2$ the R^7 groups are the same or different, or $N(R^7)_2$ is heterocycloalkyl optionally substituted with R^9 , COR^9 , $SO_{0-2}R^9$, CO_2R^9 , OR^9 , $CONR^1R^9$, NR^1R^9 , halogen, CN, $SO_2NR^1R^9$ or NO_2 ;

30 R^8 is selected from the group consisting of COR^7 , $CON(R^7)_2$, CO_2R^9 and SO_2R^9 ;

R^9 is selected from the group consisting of C_{1-6} alkyl, aryl, C_{1-6} alkyl-aryl, heteroaryl and C_{1-6} alkyl-heteroaryl; and

R^{10} is selected from the group consisting of OR^7 , COR^7 , CO_2R^1 , $CON(R^7)_2$, NR^7R^8 , $S(O)_{0-2}R^9$, $SO_2N(R^7)_2$, CN, halogen and cycloimidyl (optionally substituted with R^1); or a salt, solvate, hydrate, N-oxide or protected amino, protected carboxy or protected hydroxamic acid derivative thereof.

5

21. The compound of claim 20, wherein R^2 or R^4 is optionally substituted C_{1-6} alkyl, C_{1-6} alkyl-heteroaryl, or C_{1-6} alkyl-heterocycloalkyl; or CR^2R^3 , CR^4R^5 or CR^2-CR^4 forms the said optionally substituted ring.

10

22. The compound of claim 20, wherein B is selected from the group consisting of azetidiny, pyrrolidinyl and piperidinyl, any of which is substituted with R^7 .

23. The compound of claim 22, wherein R^7 is optionally substituted aryl or heteroaryl.

15

24. The compound of claim 20, wherein $S(O)_{0-2}$ is SO_2 .

25. The compound of claim 20, selected from the group consisting of

20

4-(1-methoxycarbonylcyclohexylmethylsulfanyl)piperidine-1-carboxylic acid *tert*-butyl ester,

2-(piperidin-4-ylsulfanyl)cyclopentanecarboxylic acid methyl ester,

1-(piperidin-4-ylsulfanylmethyl)cyclohexanecarboxylic acid methyl ester,

2-[1-(4-cyanophenyl)piperidin-4-ylsulfanyl]cyclopentane-carboxylic acid methyl ester,

25

1-[1-(4-nitrophenyl)piperidin-4-ylsulfanylmethyl]cyclohexanecarboxylic acid methyl ester,

2-[1-(4-cyanophenyl)piperidin-4-ylsulfanyl]cyclopentanecarboxylic acid,

1-[1-(4-nitrophenyl)piperidin-4-ylsulfanylmethyl]cyclohexanecarboxylic acid and

1-[1-(4-nitrophenyl)piperidin-4-ylsulfinylmethyl]cyclohexanecarboxylic acid.

30

26. A pharmaceutical composition for use in therapy, comprising a compound of claim 20, and a pharmaceutically-acceptable diluent or carrier.

27. A method for the treatment of a condition selected from the group consisting of asthma, inflammation, inflammatory diseases, autoimmune, infectious or ocular diseases, age-related macular degeneration, and cancer, which comprises administering to a subject in need thereof an effective amount of a compound of claim 20.